

# Work Order ID 80416

\*80416\*

Page 1

February-21-12 9:08:30 AM

Item ID: D3641-1 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Cover  
 Start Date: 21/02/2012 Start Qty: 20 \*12\* Cust Item ID:  
 Required Date: 06/03/2012 Req'd Qty: 12.00 \*12\* Customer:  
 Reference:

Approvals: Process Plan: M.C.J. Date: 12/02/12 Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3641	Rev C

100	FLOW WATER JET	0.00							
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\*100\*

Waterjet

FLOW CNC Waterjet

5053.038

## Memo

1-Cut as per Dwg D3641

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
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\*110\*

QC

Quality Control

## Memo

120	QC8- Inspect parts - second check	0.00							
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\*120\*

QC

Quality Control

## Memo

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80416

**\*80416\***

Page 2

February-21-12 9:08:30 AM

Item ID: D3641-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Cover

Start Date: 21/02/2012 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 06/03/2012 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	NC BRAKE	0.00							
<b>*130*</b>						19			
Brake NC	Memo	0.00							
Brake NC	Form as per Dwg D3641-1			SB 12/03/15					
140	QC5- Inspect part completeness to step on W/O	0.00							
<b>*140*</b>						419			
QC	Memo	0.00							
Quality Control									
150	Chemical Conversion Coat per QSI005 4.1	0.00							
<b>*150*</b>									
HandFinish	Memo	0.00							
Hand Finishing									

12/03/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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February-21-12 9:08:30 AM

**\*80416\***

Page 3

Item ID: D3641-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Cover

Stop

**\*NS2\***

Start Date: 21/02/2012 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 06/03/2012 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC3- Inspect Part Finish

0.00

**\*160\***

QC

Memo

0.00

Quality Control

19 12/03/15

170

Identify as per dwg & Stock Location 260

0.00

**\*170\***

Packaging

Memo

0.00

Packaging

2/3/15 (19)

180

QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC

Memo

0.00

Quality Control

MCJ 12/03/15

12-03-15

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

February-21-12 9:08:34 AM

Page 1

Work Order ID: 80416

\*80416\*

Parent Item: D3641-1

\*D3641-1\*

Parent Item Name: Cover

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 07-07-20 JLM Verified By:EC  
IPP Rev:B ECN 1050 rev.b as per dwg 08-01-10 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M5052H32S.032

Purchased

No

100

sf

83.8000

0.7987

10.08884

\*M5052H32S 032\*

\*\*

5052-H32 .032 Sheet

15.175

12.0315

Location

Loc Qty

Loc Code

MAT022

83.8

100470

2

103321

2

105998

3

108462

5

109478

6

111448

2

112664

10.4

115638

12

116657

20.5

117798

20.9

B\* 121030

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries







<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	80416
<b>Description:</b> Cover		<b>Part Number:</b>	D3641-1
<b>Inspection Dwg:</b> D3641	<b>Rev:</b> B	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.191	+0.005/-0.001	0.196	✓		VWV	HB-02
0.191	+/-0.010	0.201	✓		VWV	" "
0.37	+/-0.030	0.37	✓		VWV	" "
0.54	+/-0.030	0.53	✓		VWV	" "
0.69	+/-0.030	0.69	✓		VWV	" "
11.86	+/-0.030	11.86	✓		MT	HB 01
12.22	+/-0.030	12.22	✓		M.T	" "
23.37	+/-0.030	23.37	✓		MT	" "
23.54	+/-0.030	23.54	✓		MT	" "
23.69	+/-0.030	23.69	✓		MT	" "
24.06	+/-0.030	24.06	✓		M.T	" "
0.50	+/-0.030	0.494	✓		VWV	HB-02
4.28	+/-0.030	4.30	✓		VWV	" "
4.78	+/-0.030	4.776	✓		VWV	" "
0.032	+/-0.010	0.032	✓		VWV	" "

<b>Measured by:</b>		<b>Audited by:</b>		<b>Prototype Approval:</b>	N/A
<b>Date:</b>	12 03 15	<b>Date:</b>	12-3-15	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ 	

# Dart Aerospace Ltd

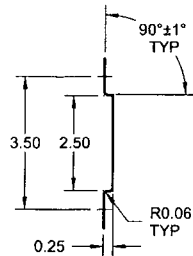
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

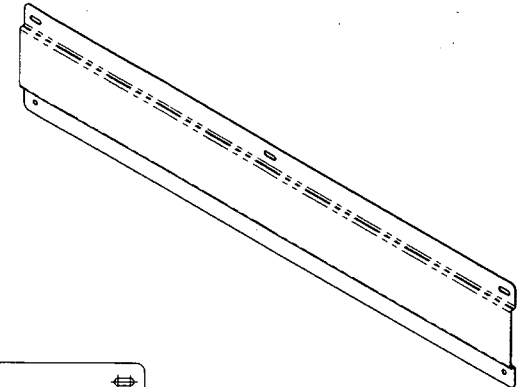
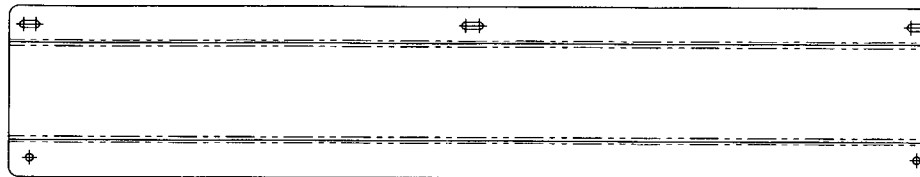
**NOTE:** Date & initial all entries

3.4  
191  
3.318



UNC  
SUB

80416 M.C.J  
12/02/21



**D3641-1 COVER**  
**(REPLACES GENEVA P/N G10606-3/-6)**  
(MAKE FROM D3641-1F FLAT PATTERN)

**RELEASED**  
2009 -11-18

**NOTES:**

- 1) MATERIAL: D3641-1F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.35 lbs

C	REFORMAT DRAWING TO CURRENT STANDARDS; D3641-3 WAS -4 (2N C4-2); ADD D3641-4 VIEW (2N A4-2); MOVE -1F/-3F FLAT PATTERN TO SHEET 3. PER NCR 09-076	RF	09.10.02
B	UPDATE PROFILE TO MATCH TOOLING; GENERAL UPDATE	LE	07.10.16
A	NEW ISSUE; REPLACES G10606	LE	07.07.27
REV.	DESCRIPTION	BY	DATE
DESIGN	TS	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. C
MFG. APPR.		D3641	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		COVER	NTS
DATE	09.10.02	<small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

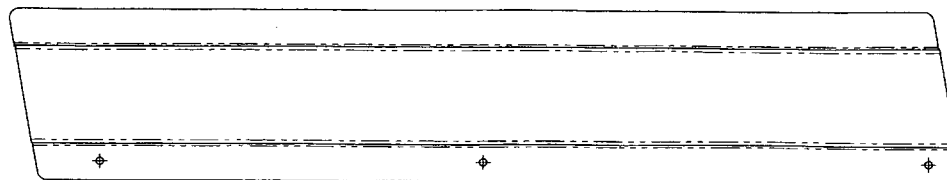
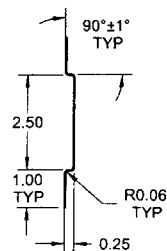
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

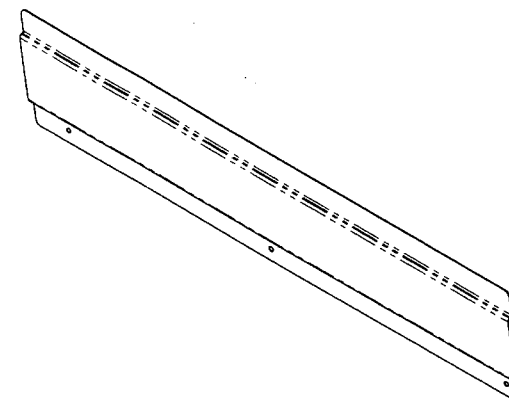
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

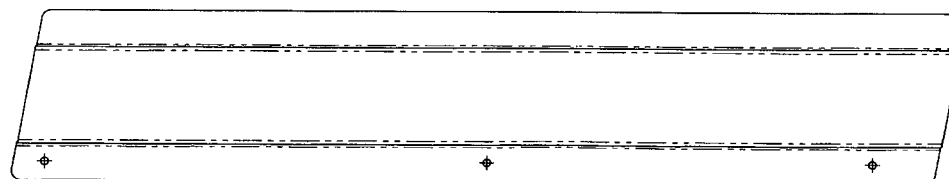
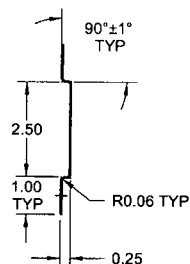
80416



**D3641-3 COVER**  
**(REPLACES GENEVA P/N G10606-5)**   
 (MAKE FROM D3641-3F FLAT PATTERN)



**D3641-3 COVER (SHOWN)**  
**D3641-4 COVER (OPPOSITE)**



**D3641-4 COVER**  
**(REPLACES GENEVA P/N G10606-4)**   
 (MAKE FROM D3641-3F FLAT PATTERN)

**RELEASED**  
 2009-11-10

**NOTES:**

- 1) MATERIAL: D3641-3F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-3/-4" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.36 lbs

DESIGN	TS	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		<b>D3641</b>	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>COVER</b>	NTS
DATE	09.10.02	<small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.          THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS          NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT          WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

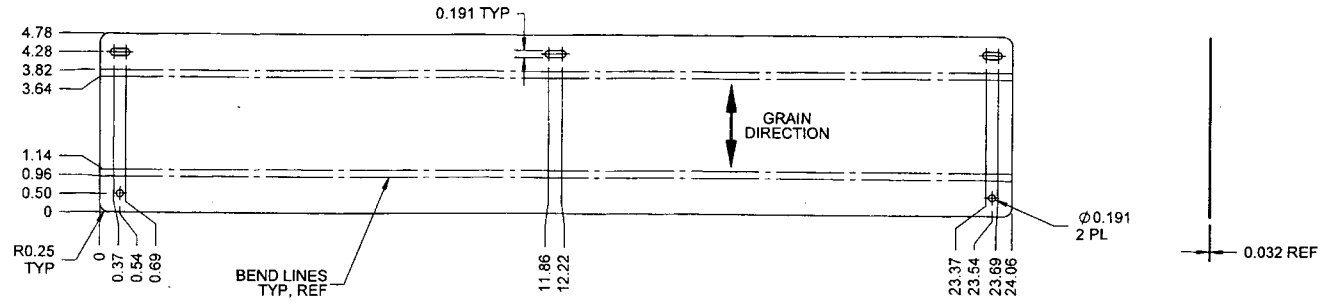
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

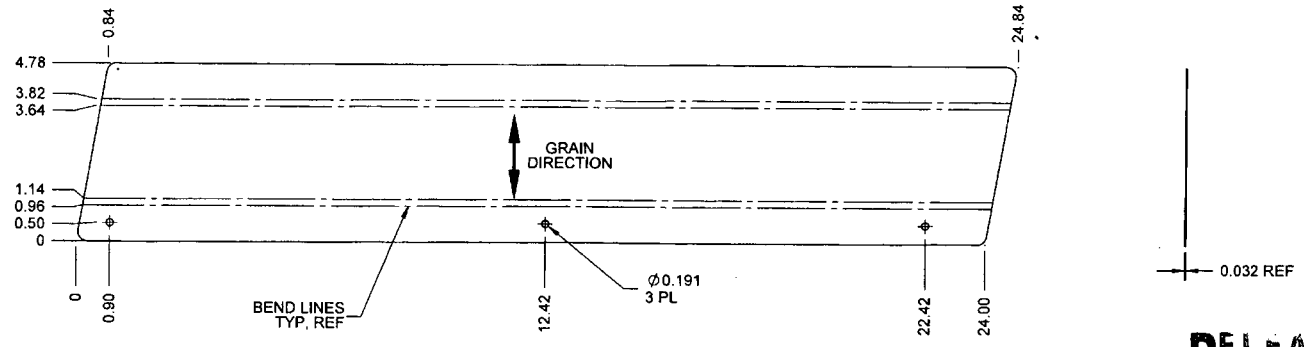
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**NOTE:** Date & initial all entries

80416



**D3641-1F FLAT PATTERN**



**D3641-3F FLAT PATTERN**

- NOTES:**
- 1) MATERIAL: 5052-H32 ALUMINUM 0.032 THICK PER QQ-A-250/8 OR AMS 4016 OR ASTM B209  
REF DART SPEC M5052H32S.032
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-1F/-3F" USING REMOVABLE TAG
  - 7) WEIGHT: 0.36 lbs

DESIGN	TS	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3641	SHEET 3 OF 3
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